Automatic calibration

Two fully functional dynamic input channels plus a third channel for speed/phase

Use the keypad, use your fingers directly on the touchscreen, or use the special stylus – all three are always active

Microsoft Windows® CE operating system provides a simple, intuitive user interface with on-screen help – no fumbling for a manual in the field

Connect external optical tachometer, strobe, and infrared input devices

Machine and point skipping supported

24 Mb standard on-board memory – expandable to 88 Mb – big enough for even the largest data collection schedules

Auto point advance saves time

Connects to external keyboard if desired

Select English or metric units

Hierarchical navigation – simple and intuitive

Transducer integrity checks

Crisp, bright quarter-VGA touchscreen LCD display with backlight

Accepts inputs from virtually any commercially available proximity, velocity, or acceleration transducer, as well as other dynamic transducers such as pressure. Internal transducer power is provided for –24Vdc and constant current devices

Small and lightweight – just 4 pounds (1.8 kg) including battery and the perfect size for easy operation with just one hand (250 mm x 163 mm x 60 mm)

Ergonomically designed keypad works equally well with right- or left-handed operation

Rugged polycarbonate/ABS plastic case design provides high impact resistance and durability

Snapshot™
for Windows® CE

View Stored Data Explorer
Ethylene Building
Ethylene Compressor Trai
Steam Turbine
Turbine Speed
Turbine Inlet Temp
Turbine Inlet Pressure
Turbine Oulet Temp
Turbine Outlet Pressure
Turbine Rotor
Inboard Turbine Bearing
Outboard Turbine Bearing

ABC

F1 F2 F3 F4 F5

BENTLY
Nevada

SYSTEM 1

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It's hard to believe, but Snapshot™ for Windows® CE has already been on the market for one year. During that time, we have received numerous questions regarding its usage and features. We've compiled the best of those questions and our answers into this informative article.

Frequently Asked Questions

Snapshot™
for Windows® CE

IP54 rating means a rugged, splashproof instrument – suitable for the harshest environments your plant has to offer

Lithium ion battery provides a minimum of 10 hours use in the field to accommodate even the longest days spent collecting data. AC power adapter lets you use at your desk or on the test stand without draining battery

Connect virtually any proportional voltage device such as pressure, flow, level, position – it's as flexible as you are

Simultaneous viewing of both channels for two-channel measurements

Membrane keypad can be used with or without gloves on – tough enough for the worst environments

Q How many vibration data collection channels does Snapshot™ for Windows® CE (SCE) have?

A It has two fully functional dynamic data collection channels plus one phase reference (Keyphasor®/speed) channel. Both dynamic channels have the same performance and data collection capabilities. Neither frequency range nor resolution is lost when operating in dual-channel mode when compared to the single-channel mode. Also, gap (dc) voltage is measured on both channels, which is very useful for trending shaft centerline position from Proximitor® inputs.

Q Is SCE available as a single-channel collector?

A It is only available as a multi-channel instrument (2 channels plus Keyphasor®).

Q Can I collect single-channel data?

A Yes. However, for the benefit of data collection speed and the ability to collect vertical and horizontal data simultaneously, we recommend dual-channel data collection whenever possible.

Display brightness can be adjusted quickly by pressing the backlight key and the left or right arrows.

Q   How much memory does SCE have?

A   The data collector has 24 Mb of on-board memory, of which 16 Mb is available for data storage. In future releases, PCM/CIA memory cards can be used to further increase the memory capacity.

Q   Can I configure SCE to only collect dynamic data on alarm?

A   No. Dynamic and static data are always collected. Historically, dynamic measurements in many data collectors were only collected when the static values (direct measurements) exceeded a user's alarm levels. Dynamic data requires considerably more memory than static data alone. Since many early data collector products were limited to less than 1 Mb of data storage, this was a method of conserving available memory and eliminating frequent trips to a host computer for downloading. Snapshot™ for Windows® CE, with 24 Mb of standard memory, does not have this limitation and always collects dynamic data.

Q   How many measurement points can I collect data from at one time?

A   That depends on the point configurations and whether you choose to download dynamic baseline or history files. Typically, for asynchronous data collection using a frequency resolution of 800 spectrum lines, more than 6000 measurement points can be collected. A measurement point is defined as the physical location from which the data is collected.

Q   Can I collect data from more than one collection schedule?

A   Yes, you can download as many collection schedules as you wish, limited only by the 16 Mb of available data storage memory.

Q   Can I view the data on the Snapshot™ unit, or do I have to download it to System 1™ software first?

A   All collected data can be viewed in the field on the data collector's built-in screen using the "view stored data" feature.

Q   How long does the battery last?

A   The SCE battery lasts a minimum of 10 hours when tested under worst-case power consumption conditions; i.e., backlight permanently on, three transducers powered (Channel A, Channel B, and Keyphasor®), and power management switched off. With power management switched on, up to 16 hours can be expected between charges.

Q   Can I change the battery, and if so, will I lose any data?

A   Data is stored in non-volatile memory, meaning you can change the battery without loss of any stored data. *However, do not change the battery in hazardous areas, as energy could be released in the form of a spark that could ignite a flammable atmosphere* .

Battery life between charges can be as long as 16 hours when power conservation features are enabled.

Q **How long does it take to recharge the battery?**

A A full recharge takes 2 hours. SCE has an internal charger that simply plugs into the wall using a special dc power adapter cord. You can even use your SCE in benchtop mode while it is charging, as long as the area you are in is safe for 110/220 Vac. An external battery charger is also available as an option, allowing you to charge spare batteries.

Q **Can I configure SCE to take dynamic measurements for points that have not been preconfigured?**

A Yes. Configuring dynamic data collection for spur-of-the-moment field measurements is easily accomplished using SCE's "analyzer" capabilities.

Q **Does SCE provide power for transducers?**

A Yes. It can provide power for any of the following:

24 Vdc Proximitor® sensors (including those used for Keyphasor® phase reference purposes)

All constant-current 24 Vdc piezoelectric transducers (most accelerometers are this type)

Bently Nevada 330400 accelerometers and 330500 Velomitor® sensors

Hand-held optical tachometer

Q **How do I mount transducers?**

A Temporary transducers can be mounted in three ways:

Quick-connect quarter-turn stud (mounted at each measurement point on the machine)

Magnetic base

Hand-held "stinger" (accelerometer with extension rod)

Q **Do I need System 1™ software to use SCE?**

A No. The unit works as a full-featured vibration meter/analyzer without any host software. However, to use as a data collector, System 1™ software is required. Data collection schedules and measurement points are configured using System 1™ and are downloaded to the data collector. Collected data is transferred to System 1™ for viewing and trending.

Q **What is the Point ID connector used for?**

A SCE is designed to allow automatic point identification utilizing a small ID tag located at the measurement location. The data collector "reads" this tag and collects data for that point, minimizing collection errors. This feature will be available in a future release.

Q **What is the PCM/CIA connector used for?**

A The PCM/CIA connector permits future application expansion. This includes additional memory, alignment hardware interfaces, wireless Ethernet cards, and a modem, to name a few.

Q **How do I adjust the display brightness?**

A The display contrast/brightness can be adjusted from the control panel. An even simpler method is to press and hold down the backlight key and then press the left or right arrow keys to make the adjustment. ORBIT

Expansion slots are designed to host a variety of PCM/CIA devices in the future, such as additional memory, modems, and wireless Ethernet.

A variety of temporary transducer mounting options are available.